

REMARKS

Claims 1, 8-10, 14, 21-23, 27, 34-36, and 40-42 are pending in this application. Claims 10, 23, 36, and 40-42 are withdrawn. Claims 6, 19, and 32 have been canceled by this amendment. Claims 1, 14, and 27 are currently independent.

Claim Rejection - 35 USC 103

Claims 1, 6, 8-9, 14, 19, 21, 22, 27, 32, 34 and 35 have been rejected under 35. U.S.C. §103(a) as being unpatentable over U.S. Patent Number 5,960,123 ("Ito") in view of U.S. Patent No. 5,265,200 ("Edgar"). Applicant respectfully traverses this rejection.

The invention of claim 14, in a preferred embodiment, is directed to an image processing apparatus comprising generating means for generating image data from an image (e.g., digital image data obtained by a digital camera, obtained by reading an image recorded on a film, or obtained by reading a printed copy of an image), multi-resolution conversion means (e.g., Fig. 14, multi-resolution conversion means 31) for obtaining one multi-resolution image data in each of a plurality of frequency bands (e.g., low, medium, and high frequency bands) by converting the image data into multiple resolutions, and contrast-sense quantification means. The contrast-sense quantification means comprises extracting means (e.g., Fig. 14, area extracting means 32) for extracting, as a

light portion, an area in which a pixel value is equal to or larger than a predetermined threshold from a first multi-resolution image data in a first frequency band (e.g., low frequency band), histogram generating means (e.g., Fig. 14, histogram generating means 33) for generating histograms (e.g., Fig. 16, histograms HM and HH) corresponding to the light portion regarding the multi-resolution image data in the first frequency band, and quantification means (e.g., Fig. 14, quantification means 34) quantifying the sense of contrast based on the histograms.

The Office Action states that Edgar teaches generating a histogram of the multi-resolution image data in each of the frequency bands, wherein said quantifying the sense of contrast is based on the histogram in each of the frequency bands by referencing 54 and the best fit curve 56, and states that the histogram in which the original image functionally altered in accordance with the best fit curve generated resulting in a digital image corrected automatically for contrast, by referencing Fig. 3 and 4, col. 9, line 20 - col. 13, line 56. The Office Action further states that Edgar teaches quantifying a sense of contrast based on the histogram in each of the frequency band by referencing the build histogram 54 and the best fit curve 56, and states that the best fit curve is functionally altered in accordance with the best fit curve generated from the original image digitized at 52, and the corrected image according to best fit curve results in a

digital image corrected automatically for contrast by referencing Fig. 3 and 4, and col. 9, line 20 - col. 13, line 56.

Edgar discloses correcting a digitized image by capturing an image and constructing a histogram (e.g., gray scale histogram). A best fit curve is generated to model the histogram (e.g., block 56 in Fig. 3). The captured image is altered in accordance with the best fit curve (e.g., block 60 in Fig. 3), which results in a digital image corrected automatically for contrast. Thus, Edgar appears to teach quantification of a sense of contrast of the image based on the image data.

On the other hand, in a preferred embodiment of the present invention, a sense of contrast is quantified based on the multi-resolution image data in each of a plurality of frequency bands. According to the claimed invention quantification of the sense of contrast is based on histograms (corresponding to the light portion which is extracted from a first multi-resolution image data in a first frequency band) generated using image data in the frequency bands higher than the first frequency band.

Applicant submits that the image data of the captured image of Edgar is not multi-resolution image data in each of a plurality of frequency bands. Furthermore, Applicant submits that Edgar fails to teach or suggest at least the claimed histogram generating means which generates histograms, corresponding to a light portion which is extracted from a first multi-resolution image data in a first

frequency band, for multi-resolution image data in frequency bands higher than the first frequency band. As admitted in the Office Action, Ito also "does not disclose the claimed quantifying a sense of contrast of an image, based on multi-resolution image data." These same arguments apply as well to claims 1 and 27, as well as their respective dependent claims.

Thus, Applicant submits that the rejection fails to establish *prima facie* obviousness. Accordingly, Applicant respectfully requests that the rejection be reconsidered and withdrawn.

Conclusion

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Robert W. Downs (Reg. No. 48,222) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), Applicant(s) respectfully petition(s) for a two (2) month extension of time for filing a reply in connection with the present application, and the required fee of \$450.00 is attached hereto.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees

required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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